

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WATERSHED MANAGEMENT DIVISION  
ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2<sup>ND</sup> FLOOR  
MONTPELIER, VT 05620-3522

Permit No.: 3-1502  
PIN: EJ98-0183  
NPDES No.: VT0001121

**DRAFT**  
**DISCHARGE PERMIT**

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (10 V.S.A. chapter 47), the Vermont Water Pollution Control Permit Regulations as amended, and the federal Clean Water Act as amended (33 U.S.C. §1251 *et seq.*),

Champlain Black Marble, LLC  
P.O. Box 28  
West Rutland, VT 05777

(hereinafter referred to as the “Permittee”) is authorized by the Secretary of Natural Resources (Secretary) to discharge from a facility located at:

“Goodsell Quarry”  
837 Quarry Road (Town Highway 8)  
Isle La Motte, VT, 05463

to an unnamed drainage ditch that drains to Lake Champlain, Class B at the point of discharge in accordance with the following conditions.

This permit shall become effective on the November 1, 2019.

This permit and the authorization to discharge shall expire on September 30, 2024.

Emily Boedecker, Commissioner  
Department of Environmental Conservation

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Chris Gianfagna, Wastewater Program Manager  
Watershed Management Division

## I. SPECIAL CONDITIONS

### A. EFFLUENT LIMITS and MONITORING REQUIREMENTS

1. Until September 30, 2024, the Permittee is authorized to discharge from outfall serial number S/N 001 (located at approximately 44.857161° N, 73.330238° W): a combination of stormwater and treated mineral processing water to an unnamed ditch that drains to Lake Champlain. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Maximum Day	Measurement Frequency	Sample Type
Flow <sup>1</sup>		0.4 MGD	Daily	Estimate
Turbidity <sup>2</sup>	10 NTU – October 1 through May 31		2x per month	Grab
	25 NTU – June 1 through September 30			
Total Suspended Solids (TSS) <sup>2</sup>		10 mg/L – October 1 through May 31	2x per month	Grab
		25 mg/L – June 1 through September 30		
Total Arsenic		Monitor Only (mg/L)	2x per month <sup>4</sup>	Grab
Total Phosphorus (TP) <sup>3</sup>	0.80 mg/L		2x per month	Grab
Total Petroleum Hydrocarbons (TPH)		Monitor Only (mg/L)	2x per month	Grab
pH <sup>2</sup>	Between 6.5 and 8.5 SU		2x per month	Grab

*Samples collected in compliance with the monitoring requirements specified above shall be collected at locations which are representative of the effluents discharged.*

<sup>1</sup> Flow shall be estimated based on pump run times and pump capacity.

<sup>2</sup> If a turbidity, pH or TSS sample exceeds their limit, the Permittee shall immediately discontinue discharge until TSS, pH and turbidity samples meet the permit limits.

<sup>3</sup> A Phosphorus limit has been added based upon 10 V.S.A. § 1266a.

<sup>4</sup> See I.A.2.b

## **2. Special Conditions**

- a.** Samples do not need to be collected during months without a discharge. Monthly reports must be submitted even if no discharge occurs.
- b.** Arsenic shall be monitored twice a month for the first year of the permit. If no concentrations are observed above the minimum detection level, then arsenic may be sampled annually at the same time as the other metals and nitrogen. If concentrations are observed above the minimum detection level then sampling shall continue at twice a month and this permit may be amended to require additional analyses or to establish specific effluent limits. If no arsenic concentrations are observed above the detection limit during the first year of the permit, the permittee shall submit a written statement to that effect prior to reducing the sampling frequency.
- c.** The quarry shall be designed and operated to reduce the inflow of upgradient water into the quarry as much as possible.
- d.** While quarry operations are in progress, water recycling shall be maximized to the extend feasible in order to reduce the volume of water discharged.
- e.** Settled solids shall be removed from the sump and settling ponds as necessary to maintain compliance with the effluent limitations specified in Condition 1 above.
- f.** The area downstream from the discharge point shall be inspected regularly (at least twice a year) for signs of erosion. These inspections shall be documented on the monitoring reports for the month that the inspection occurs. The Permittee shall take prompt action to correct any instances of erosion resulting from the discharge.
- g.** The Permittee shall prepare and implement a spill prevention and control plan to prevent any fuel, chemical spills or leaks from entering the wastewater treatment system (settling ponds). A copy of this plan shall be provided to the Secretary with the first monitoring report. This discharge of any fuels, chemicals, or other pollutants not specifically authorized by this permit is prohibited.
- h.** The discharge shall not cause a violation of the Vermont Water Quality Standards in the receiving waters.
- i.** Any settled solids removed from the sump and settling ponds shall be disposed of properly and not within 100 feet of waters of the State.

## **3. Metals and Nutrient Analyses**

Analyses for metals and nutrients shall be conducted annually during the permit cycle. Results of these analyses shall be submitted by October 15<sup>th</sup> of each year.

The Permittee shall collect and analyze the effluent grab samples from S/N 001 for the following total metals: antimony, cadmium, chromium, copper, iron, lead, nickel, selenium, silver and zinc, and the following nutrient: total nitrogen.

Samples shall be collected according to the schedule in the following table:

<b>Metals and Nutrients Analyses Sampling Dates</b>		
<b>Year</b>	<b>Sampling Period</b>	<b>Quarry Activity</b>
2020 and even years	March - June	Dewatering
2021 and odd years	August- September	Active Quarrying

Based upon the results of these analyses or any other analyses conducted on the effluent this permit may be amended to require additional analyses or to establish specific effluent limits.

## **B. REAPPLICATION**

If the Permittee desires to continue to discharge after the expiration of this permit, the Permittee shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: **March 31, 2024**

## **C. OPERATING FEES**

This discharge is subject to operating fees as required by 3 V.S.A. § 2822.

## **D. MONITORING AND REPORTING**

### **1. Sampling and Analysis**

The sampling, preservation, handling, and analytical methods used shall conform to the test procedures published in 40 C.F.R. Part 136.

The Permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under the Code of Federal Regulations, Title 40, Part 136 for the analysis of the pollutants or pollutant parameters specified in Condition I.A. above.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The Permittee shall identify the effluent sampling location used for each discharge.

## **2. Reporting**

The Permittee is required to submit monthly reports of monitoring results on Discharge Monitoring Report (DMR) form WR-43. Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

The Permittee shall electronically submit its DMRs via Vermont's on-line electronic reporting system. The Permittee shall electronically submit additional compliance monitoring data and reports specified by the Secretary. When the Permittee submits DMRs using an electronic system designated by the Secretary, it is not required to submit hard copies of DMRs. The link below shall be used for electronic submittals:

<https://anronline.vermont.gov/>

If, in any reporting period during which the quarry is operational, there has been no discharge, the Permittee must submit that information by the report due date.

All reports shall be signed:

- a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates and the authorization is made in writing and submitted to the Agency;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor; or
- d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

## **3. Recording of Results**

The Permittee shall maintain records of all information resulting from any monitoring activities required, including:

- a. The exact place, date, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The dates and times the analyses were performed;
- d. The individual(s) who performed the analysis;
- e. The analytical techniques and methods used including sample collection handling and preservation techniques;

- f. The results of such analyses.
- g. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records; and
- h. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.A of this permit.
- i. For analyses performed by contract laboratories:
  - a. The detection level reported by the laboratory for each sample; and
  - b. The laboratory analytical report including documentation of the QA/QC and analytical procedures.

The results of monitoring requirements shall be reported (in the units specified) on the DMR form WR-43 or other forms approved by the Secretary.

When “non-detects” are recorded, the method detection limit shall be reported and used in calculating any time-period averaging for reporting on DMRs.

#### **4. Additional Monitoring**

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR WR-43. Such increased frequency shall also be indicated.

## **II. GENERAL CONDITIONS**

### **A. MANAGEMENT REQUIREMENTS**

#### **1. Facility Modification / Change in Discharge**

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties pursuant to 10 V.S.A. chapters 47, 201, and/or 211. Any anticipated facility alterations or expansions or process modifications which will result in new, different, or increased discharges of any pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the Agency of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

## **2. Noncompliance Notification**

- a.** The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- b.** In the event the Permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:
  - i.** Breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units);
  - ii.** Accidents caused by human error or negligence;
  - iii.** Any unanticipated bypass or upset which exceeds any effluent limitation in the permit;
  - iv.** Violation of a maximum day discharge limitation for any of the pollutants listed by the Agency in this permit; or
  - v.** Other causes such as acts of nature,the Permittee shall provide notice as specified in subdivisions (c) of this subsection.
- c.** For any non-compliance not covered under Section II.A.2.b. of this permit, an operator of a wastewater treatment facility or the operator's delegate shall notify the Agency within 24 hours of becoming aware of such condition and shall provide the Agency with the following information, in writing, within five days:
  - i.** Cause of non-compliance;
  - ii.** A description of the non-complying discharge including its impact upon the receiving water;
  - iii.** Anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;
  - iv.** Steps taken by the Permittee to reduce and eliminate the non-complying discharge; and
  - v.** Steps to be taken by the Permittee to prevent recurrence of the condition of non-compliance.

### 3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. The Permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment and control facilities and systems (and related appurtenances) installed or used by the Permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures.
- b. The Permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit; and

### 4. Quality Control

The Permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements or shall ensure that both activities will be conducted.

The Permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

For purposes of demonstrating compliance with the requirements of Condition II.A.3.a) of this permit regarding adequate laboratory controls and appropriate quality assurance procedures, the Permittee shall conduct and pass an annual laboratory proficiency test, via an accredited laboratory, for the analysis of all pollutant parameters performed within their facility laboratory and reported as required by this permit. This can be carried out as part of an EPA DMR-QA study. Results shall be submitted to the Secretary by **December 31, annually**. The first proficiency test results are due by **December 31, 2020**.

### 5. Bypass

The bypass of facilities (including pump stations) is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. § 1268. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the activity in order to maintain compliance with the conditions of this permit.

### 6. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.



## **7. Records Retention**

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, all calibration and maintenance of instrumentation records and all original chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a minimum of three years, and shall be submitted to the Agency upon request. This period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Agency.

## **8. Emergency Pollution Permits**

Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the Permittee immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A. § 1268. The Permittee shall notify the Agency of the emergency situation by the next working day.

10 V.S.A. § 1268 reads as follows:

When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but, in any event, no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies, and the secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;
- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters;
- (5) the cause or reason for the emergency is not due to willful or intended acts or omissions of the applicant.

Application shall be made to the Secretary at the following address: Agency of Natural Resources, Department of Environmental Conservation, One National Life Drive, Main Building, 2<sup>nd</sup> Floor, Montpelier VT 05620-3522.

## **9. Power Failure**

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

- a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,
- b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

## **B. RESPONSIBILITIES**

### **1. Right of Entry**

The Permittee shall allow the Agency or authorized representative, upon the presentation of proper credentials:

- a. To enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
- c. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. To sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the federal Clean Water Act, any substances or parameters at any location.

### **2. Transfer of Ownership or Control**

This permit is not transferable without prior written approval of the Agency. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Agency **at least 30 days in advance of the proposed transfer date**. The notice to the Agency shall include a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them. The Permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

- a.** A properly completed application form provided by the Agency and the applicable processing fee.
- b.** A written statement from the prospective owner or operator certifying:
  - i.** The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership;
  - ii.** The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit; and
  - iii.** The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- c.** The date of the sale or transfer.

The Agency may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

### **3. Confidentiality**

Pursuant to 10 V.S.A. § 1259(b):

Any records, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter.

Claims for confidentiality for the following information will be denied:

- a.** The name and address of any permit applicant or Permittee.
- b.** Permit applications, permits, and effluent data.
- c.** Information required by application forms, including information submitted on the forms themselves and any attachments used to supply information required by the forms.

#### **4. Permit Modification, Suspension, and Revocation**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;  
or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance shall not stay any permit condition.

The Permittee shall provide to the Agency, within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit

#### **5. Toxic Effluent Standards**

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Clean Water Act for a toxic pollutant which is present in the Permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be modified or revoked and reissued in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

#### **6. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under 10 V.S.A. §1281.

#### **7. Civil and Criminal Liability**

Except as provided in, "Bypass" (Section II.A.5), "Emergency Pollution Permits" (Section II.A.9), and "Power Failure" (Section II.A.10), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance. Civil and criminal penalties for non-compliance are provided for in 10 V.S.A. Chapters 47, 201 and 211.

**8. State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

**9. Property Rights**

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

**10. Other Information**

If the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Agency, it shall promptly submit such facts or information.

**11. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**12. Authority**

This permit is issued under authority of 10 V.S.A. §§1258 and 1259 of the Vermont Water Pollution Control Act, the Vermont Water Pollution Control Permit Regulation, and Section 402 of the Clean Water Act, as amended.

**III. ADDITIONAL CONDITIONS****A. OTHER REQUIREMENTS**

This permit shall be modified, suspended or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or
2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

## B. DEFINITIONS

For purposes of this permit, the following definitions shall apply.

**Agency** – means the Vermont Agency of Natural Resources.

**Annual Average** - means the highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

**Average** - means the arithmetic means of values taken at the frequency required for each parameter over the specified period.

**Bypass** – means the intentional diversion of waste streams from any portion of the treatment facility.

**The Clean Water Act** - means the federal Clean Water Act, as amended (33 U.S.C. § 1251, *et seq.*).

**Composite Sample** - means a sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

**Daily Discharge** - means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/L the daily discharge is calculated as the average measurement of the pollutant over the day.

**Discharge** – means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into the waters of the State.

**Grab Sample** – means an individual sample collected in a period of less than 15 minutes.

**Incompatible Substance** – means any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on the works or on water quality. This includes all pollutants required to be regulated under the Clean Water Act.

**Instantaneous Maximum** - means a value not to be exceeded in any grab sample.

**Major Contributing Industry** – means one that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a treatment works or on the quality of effluent from that treatment works.

**Maximum Day** (maximum daily discharge limitation) - The highest allowable “daily discharge” (mg/L, lbs or gallons).

**Mean** - is the arithmetic mean.

**Monthly Average** (average monthly discharge limitation) – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

**NPDES** - The National Pollutant Discharge Elimination System.

**Secretary** – means the Secretary of the Agency of Natural Resources or the Secretary’s duly authorized representative.

**Septage** – means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

**Untreated Discharge** – means (1) combined sewer overflows from a WWTF; (2) overflows from sanitary sewers and combined sewer systems that are part of a WWTF during dry weather flows, which result in a discharge to waters of the State; (3) upsets or bypasses around or within a WWTF during dry or wet weather conditions that are due to factors unrelated to a wet weather storm event and that result in a discharge of sewage that has not been fully treated to waters of the State; and (4) discharges from a WWTF to separate storm sewer systems.

**Waste** – means effluent, sewage or any substance or material, liquid, gaseous, solid, or radioactive, including heated liquids, whether or not harmful or deleterious to waters.

**Waste Management Zone** – A specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist in a waste management zone due to the authorized discharge.

**Waters** includes all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border upon the State or any portion of it.

**Weekly average** - (average weekly discharge limitation) – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

**Whole Effluent Toxicity (WET)** – Means the aggregate toxic effect of an effluent measured directly by a toxicity test.

**WWTF or wastewater treatment facility** shall have the same meaning as “pollution abatement facilities,” as defined under 10 V.S.A. § 1251, which means municipal sewage treatment plants, pumping stations, interceptor and outfall sewers, and attendant facilities as prescribed by the Department to abate pollution of the waters of the State.



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MONTPELIER, VT 05620-3522

FACT SHEET  
(September 2019)

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO  
DISCHARGE TO WATERS OF THE UNITED STATES**

**PERMIT NO:** 3-1502  
**PIN:** EJ98-0183  
**NPDES NO:** VT0001121

**NAME AND ADDRESS OF APPLICANT:**

Champlain Black Marble Co., LLC  
P.O. Box 28  
West Rutland, VT 05777

**NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:**

Isle La Motte Quarry (Goodsell Quarry)  
837 Quarry Road  
Isle La Motte, VT 05463

**RECEIVING WATER:** Unnamed ditch discharging to Lake Champlain

**CLASSIFICATION:** Class B(2). Class B(2) waters are suitable for swimming and other forms of water-based recreation and irrigation of crops and other agricultural uses without treatment; good aesthetic value; aquatic biota and wildlife sustained by high quality aquatic habitat; suitable for boating, fishing, and other recreational uses; acceptable for public water supply with filtration and disinfection.

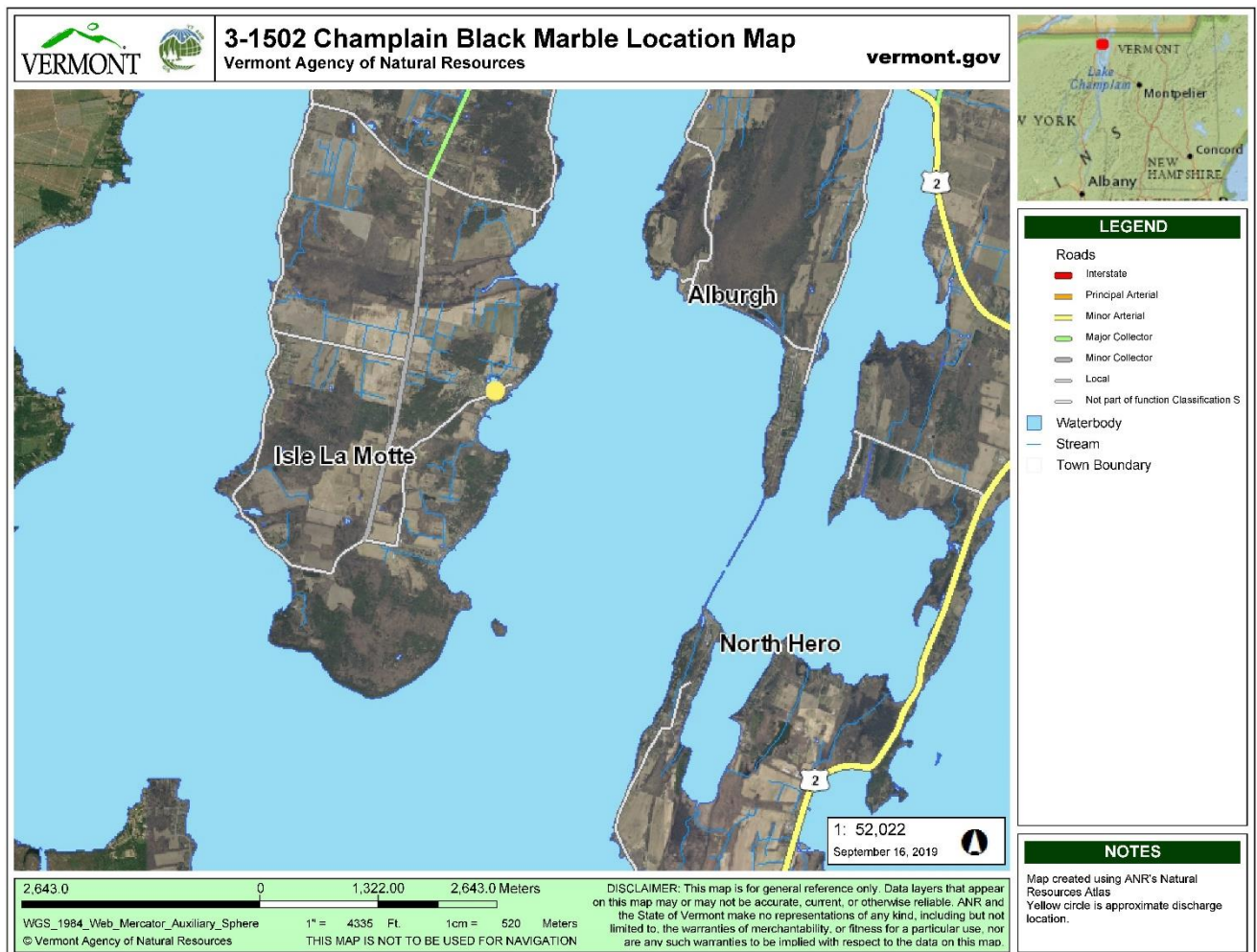
**I. Proposed Action, Type of Facility, and Discharge Location**

The Vermont Agency of Natural Resources (Agency) received a renewal application for the permit to discharge into the designated receiving water from the above-named applicant on July 16, 2018. The facility's previous permit was effective on January 1, 2014. The previous permit (hereafter referred to as the "current permit") has been administratively continued, pursuant to 3 V.S.A. § 814, as the applicant filed a complete application for permit reissuance within the prescribed time period as per the Vermont Water Pollution Control Permit Regulations (VWPCPR) § 13.5(b). At this time, the Secretary has made a tentative decision to reissue the discharge permit.

The facility is engaged in the quarrying and processing of dimension stone (marble) (SIC 1411) and discharges wastewater associated with quarry dewatering, dust control, and dimension stone quarrying that is comingled with stormwater.

Water is discharged intermittently, primarily in the spring, from a pair of settling ponds with an outlet (serial number S/N 001) which is located at approximately 44.857161° N, 73.330238° W to an unnamed ditch that discharges into Lake Champlain.

A location map is shown below. The approximate discharge location is represented by the yellow circle.



## II. Description of Discharge

This permit authorizes the discharge of a commingled wastewater consisting of quarry dewatering water, sawing and drilling process water, dust control water and stormwater runoff.

### **III. Limitations and Conditions**

The effluent limitations of the draft permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the draft permit:

Effluent Limitations:	Pages 2-4 of 16
Monitoring Requirements:	Pages 2-4 of 16

### **IV. Statutory and Regulatory Authority**

#### **A. Clean Water Act and NPDES Background**

Congress enacted the Clean Water Act (CWA or Act), “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” CWA § 101(a). To achieve this objective, the CWA makes it unlawful for any person to discharge any pollutant into the waters of the United States from any point source, except as authorized by specified permitting sections of the Act, one of which is Section 402. CWA §§ 301(a), 402(a). Section 402 establishes one of the CWA's principal permitting programs, the National Pollutant Discharge Elimination System (NPDES). Under this section of the Act, the U.S. Environmental Protection Agency (EPA) may “issue a permit for the discharge of any pollutant, or combination of pollutants” in accordance with certain conditions. CWA § 402(a). The State of Vermont has been approved by the EPA to administer the NPDES Program in Vermont. NPDES permits generally contain discharge limitations and establish related monitoring and reporting requirements. CWA § 402(a)(1) - (2).

Section 301 of the CWA provides for two types of effluent limitations to be included in NPDES permits: “technology-based” limitations and “water quality-based” limitations. CWA §§ 301, 303, 304(b); 40 CFR Parts 122, 125, 131. Technology-based limitations, generally developed on an industry-by-industry basis, reflect a specified level of pollutant-reducing technology available and economically achievable for the type of facility being permitted. CWA § 301(b). As a class, WWTFs must meet performance-based requirements based on available wastewater treatment technology. CWA § 301(b)(1)(B). The performance level for WWTFs is referred to as “secondary treatment.” Secondary treatment is comprised of technology-based requirements expressed in terms of BOD<sub>5</sub>, TSS and pH; 40 C.F.R. Part 133.

Water quality-based effluent limits, on the other hand, are designed to ensure that state water quality standards are achieved, irrespective of the technological or economic considerations that inform technology-based limits. Under the CWA, states must develop water quality standards for all water bodies within the state. CWA § 303. These standards have three parts: (1) one or more “designated uses” for each water body or water body segment in the state; (2) water quality “criteria,” consisting of numerical concentration levels and/or narrative statements specifying the amounts of various pollutants that may be present in each water body without impairing the designated uses of that water body; and (3) an antidegradation provision, focused on protecting high quality waters and protecting and maintaining water quality necessary to protect existing uses. CWA § 303(c)(2)(A); 40 C.F.R. § 131.12. The applicable water quality standards for this permit are the 2017 Vermont Water Quality Standards (Environmental Protection Rule, Chapter 29a).

A permit must include limits for any pollutant or pollutant parameter (conventional, non-

conventional, toxic, and whole effluent toxicity) that is or may be discharged at a level that causes or has "reasonable potential" to cause or contribute to an excursion above any water quality standard, including narrative water quality criteria. See 40 CFR §122.44(d)(1). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion. A NPDES permit must contain effluent limitations and conditions in order to ensure that the discharge does not cause or contribute to water quality standard violations.

Receiving stream requirements are established according to numerical and narrative standards adopted under state law for each stream classification. When using chemical-specific numeric criteria from the State's water quality standards to develop permit limits, both the acute and chronic aquatic life criteria are used and expressed in terms of maximum allowable in stream pollutant concentrations. Acute aquatic life criteria are generally implemented through maximum daily limits and chronic aquatic life criteria are generally implemented through average monthly limits.

Where a state has not established a numeric water quality criterion for a specific chemical pollutant that is present in the effluent in a concentration that causes or has a reasonable potential to cause a violation of narrative water quality standards, the permitting authority must establish effluent limits in one of three ways: based on a "calculated numeric criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and fully protect the designated use"; on a "case-by-case basis" using CWA Section 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, in certain circumstances, based on an "indicator parameter." 40 CFR § 122.44(d)(1)(vi)(A-C).

The state rules governing Vermont's NPDES permit program are found in the Vermont Water Pollution Control Permit Regulations (Environmental Protection Rule, Chapter 13).

### **1. Reasonable Potential Determination**

In determining whether this permit has the reasonable potential to cause or contribute to an impairment, Vermont has considered:

- 1) Existing controls on point and non-point sources of pollution as evidenced by the Vermont surface water assessment database;
- 2) Pollutant concentration and variability in the effluent as determined from the permit application materials, monthly discharge monitoring reports (DMRs), or other facility reports;
- 3) Receiving water quality based on targeted water quality and biological assessments of receiving waters, as applicable, or other State or Federal water quality reports;
- 4) Toxicity testing results based on the Vermont Toxic Discharge Control Strategy, and compelled as a condition of prior permits;
- 5) Available dilution of the effluent in the receiving water, expressed as the instream waste concentration. In accordance with the applicable Vermont Water Quality Standards,

available dilution for rivers and streams is based on a known or estimated value of the lowest average flow which occurs for seven (7) consecutive days with a recurrence interval of once in ten (10) years (7Q10) for aquatic life and human health criteria for non-carcinogens, or at all flows for human health (carcinogens only) in the receiving water. For nutrients, available dilution for stream and river discharges is assessed using the low median monthly flow computed as the median flow of the month containing the lowest annual flow. Available dilution for lakes is based on mixing zones of no more than 200 feet in diameter, in any direction, from the effluent discharge point, including as applicable the length of a diffuser apparatus.

- 6) All effluent limitations, monitoring requirements, and other conditions of the proposed draft permit.

The Reasonable Potential Determination for this facility was waived due to the size and nature of the discharge. The memorandum detailing this decision is attached to this Fact Sheet as Attachment A.

## **B. Anti-Backsliding**

Section 402(o) of the CWA provides that certain effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the current permit. EPA has also promulgated anti-backsliding regulations which are found at 40 C.F.R. § 122.44(l). Unless applicable anti-backsliding exemptions are met, the limits and conditions in the reissued permit must be at least as stringent as those in the current permit.

## **V. Receiving Water**

The receiving water for this discharge is an unnamed ditch discharging into Lake Champlain which is a designated Warm Water Fish Habitat near the point of discharge during the months June, July, August and September. The remainder of the year these waters are designated as Cold Water Fish Habitat.

## **VI. Facility History and Background**

The Champlain Black Marble Company, LLC owns and operates the "Isle La Motte Quarry" in Isle La Motte, VT. The Champlain Black Marble Company, LLC is owned by the Tennessee Marble Company. This quarry is also known as the Goodsell Quarry to differentiate it from the other quarries on the island. Quarries have operated on Isle La Motte since 1832. The quarry process consists of the sawing and percussion drilling of marble dimension stone. Several sources of wastewater are generated on the site and commingle in the collection and treatment system prior to discharge.

Specifically:

1. Dewatering Water is generated at the site. Stormwater and groundwater seepage are removed from the quarry to allow for the removal of rock.

2. Quarry Operations Wastewater is used for various purposes, including dust suppression for transportation, sawing and drilling activities.

3. Stormwater Runoff is generated on the site from haul roads, storage piles, buildings, etc. is conveyed via swales, culverts, and grading back into the quarry, and some off-site stormwater flows onto the site.

The Agency has determined that the commingled discharge of process generated wastewater from this operation is subject to 40 CFR Part 436. The term "process generated wastewater" shall mean any wastewater used in the slurry transport of mined material, air emissions control, or processing exclusive of mining. The term shall also include any other water which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for the treatment of such wastewater.

The wastewater is treated via a pair of settling ponds. Discharges occur primarily in the spring but may also happen in the summer and fall depending upon rainfall. The quarry does not operate during the winter and therefore does not pump effluent during that time.

## **VII. Permit Basis and Explanation of Effluent Limitation Derivation**

**A. Flow** – The permit contains a monitoring and reporting requirement for flows discharged from this facility. A daily flow rate has been established based upon the reported discharges but there is no annual or monthly rate. Volumes are to be estimated daily for each discharge. There is also a requirement to maintain erosion protection in the swale downstream from the discharge point. These requirements are unchanged from the existing permit.

### **B. Conventional Pollutants**

**pH** – The pH limitation is 6.5 - 8.5 Standard Units as specified in Section 3-01 B.9. in the Vermont Water Quality Standards. Monitoring is required twice a month when a discharge occurs. This is a reduction in sampling frequency from the previous permit intended to help standardize reporting for data processing purposes.

**Total Suspended Solids (TSS)** – The draft permit requires a monthly average limit of 10 mg/L TSS during the months of October-May and 25 mg/L TSS during the months of June-September which is unchanged from the previous permit. Monitoring is required twice a month when a discharge occurs. This is a reduction in sampling frequency from the previous permit intended to help standardize reporting for data processing purposes. This limit is based professional judgement and upon Section 3-03.A and Appendix A (Fish Habitat Designation) of the 2017 Vermont Water Quality Standards. The receiving waters are designated as Cold Water Fish Habitat during October-May and as Warm Water Fish Habitat during June-September.

### **C. Non-Conventional and Toxics**

**Turbidity** – The draft permit requires a monthly average limit of 10 NTU during the months of October-May and 25 NTU during the months of June-September which is unchanged from the previous permit. Monitoring is required twice a month when a discharge occurs. This is a

reduction in sampling frequency from the previous permit intended to help standardize reporting for data processing purposes. This limit is based upon Section 3-04.A and Appendix A (Fish Habitat Designation) of the 2017 Vermont Water Quality Standards.

**Total Petroleum Hydrocarbons** – The draft permit requires monitoring of Total Petroleum Hydrocarbons when a discharge occurs. No limit is set in the permit. Monitoring is required twice per month when a discharge occurs. This is a new requirement based upon Sections 3-03.2, 3-03.3 & 3-03.7 of the 2017 Vermont Water Quality Standards. Petroleum products used in the operation and maintenance of the quarry pose a potential threat to waters of the State and this information is needed to more accurately characterize the discharged effluent.

**Total Phosphorus (TP)** – The draft permit requires monitoring of Total Phosphorus when a discharge occurs and a monthly average limit of 0.80 mg/L. Monitoring is required twice a month which is an increase from the current permit. This limit is a new requirement that is based upon 10 V.S.A. § 1266a which prohibits the discharge of wastes containing a monthly average concentration of total phosphorus in excess of 0.80 mg/L in the Lake Champlain basin.

**Metals and Nutrient Analyses** – The draft permit requires effluent grab samples for antimony, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc, and total nitrogen. Metals are occasionally associated with rock formations in the state and can pose threats to both human and aquatic life. Nitrogen can be found in soils, rocks and stormwater and can pose threats to human and aquatic life as well as playing a significant role in eutrophication. It is necessary to collect data about these pollutants in order to better characterize the discharge from this facility in order to protect waterbodies as well as the health of human and aquatic life. The pollutants sampled for have not changed from the previous permit, with the exception of arsenic as described below, but the timing of the samples has been altered to provide more flexibility in order to help assure that samples are collected and analyzed within the permit period. Samples will be collected during the spring dewatering period and after the quarry has been in operation. This reflects an increase in sampling frequency from the previous permit.

Per EPA excess nitrogen (N) and phosphorus (P) are the leading cause of water quality degradation in the United States. Historically nutrient management focused on limiting a single nutrient—phosphorus or nitrogen—based on assumptions that production is usually phosphorus limited in freshwater and nitrogen limited in marine waters. Scientific research demonstrates this is an overly simplistic model. The evidence clearly indicates management of both phosphorus and nitrogen is necessary to protect water quality. The literature shows that aquatic flora and fauna have differing nutrient needs, some are P dependent, others N dependent and others are co-dependent on these two nutrients.

Like P, N promotes noxious aquatic plant and algal growth. High concentrations of P and N together cause greater growth of algae than P alone. The relative abundance of these nutrients also influences the type of species within the community. Furthermore, a high N-to-P ratio may exacerbate the growth of cyanobacteria, while elevated levels of nitrogen increase toxicity in some cyanobacteria species. Given the dynamic nature of all aquatic ecosystems, for the State to fully understand the degradation to water quality it is necessary to limit P and monitor Total Nitrogen.

For more information, see:

<https://www.epa.gov/sites/production/files/documents/nandpfactsheet.pdf>.

**Total Arsenic** – Monitoring results during the previous permit cycle show that Arsenic is sometimes present in the effluent at levels exceeding water quality standards. However, there isn't sufficient data to establish a limit and therefore the monitoring requirements for Arsenic have been increased from the previous permit. Arsenic monitoring has been increased to the frequency of pH, TSS and Turbidity monitoring: twice a month when a discharge occurs. If arsenic is not detected during the first year of monitoring, then the monitoring frequency will revert to annually at the same time as the other metals and nutrients. If it is detected then sampling will continue at the same frequency as for pH, TSS and Turbidity and the permit may be amended to require additional analyses or to establish specific effluent limits. This requirement has changed from the previous permit.

### **VIII. Procedures for Formulation of Final Determinations**

The public comment period for receiving comments on this draft permit is from **September 17, 2019 through October 17, 2019** during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on **October 17, 2019** will be retained by the Secretary and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Secretary.

Per Vermont Act 150, public comments concerning draft permits must be submitted via the Environmental Notice Bulletin (ENB) for all applications deemed administratively complete after January 1, 2018. In addition to providing a portal for submitting public comments, the ENB website presents details on the processing history, draft permit documents for review, and can be used to request public meetings. The ENB public site is <http://enb.vermont.gov> and the DEC ENB information page is <http://dec.vermont.gov/permits/enb>.

NPDES permits are considered Type 1 permits under Act 150 and are subject to a 30-day public comment period. All comments received within the period described above will be considered by the Department of Environmental Conservation in its final ruling to grant or deny authorization to discharge. Any person who has commented on the draft permit may, within 30 days of the final ruling by the Department of Environmental Conservation to grant or deny authorization to discharge, appeal the ruling to the Environmental Court pursuant to 10 V.S.A. Chapter 220.




**ATTACHMENT A**

Reasonable Potential Determination Waiver For Champlain Black Marble, LLC

**Agency of Natural Resources  
Department of Environmental Conservation  
Watershed Management Division  
1 National Life Drive 2 Main  
802-828-1535**

**MEMORANDUM**

To: John Merrifield, Wastewater Management Program (WWP)

From: Amy Polaczyk, WWP 

Cc: Rick Levey, Monitoring, Assessment and Planning Program  
Chris Gianfagna, Manager, WWP

Date: August 22, 2019

Subject: Champlain Black Marble Company, LLC Reasonable Potential Determination Decision

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***Facility:***

Champlain Black Marble Company, LLC  
Permit No. 3-1502  
NPDES No. VT0001121

***Hydrology for Champlain Black Marble Company, LLC used in this evaluation:***

Receiving Water: Lake Champlain  
Permitted Discharge: 0.4 MGD = 0.62 CFS

The Reasonable Potential Determination for the Champlain Black Marble Company, LLC discharge and has been examined and it has been determined that a full assessment is not necessary due to the small discharge, limited frequency of discharge, history of monitoring and compliance, and the significant available dilution of the receiving water.

No mixing zone is authorized for this facility so compliance with VT Water Quality Standards is determined at the discharge point.

Two sets of data are available for the following total metals: Antimony, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Nickel, Selenium, Silver and Zinc. All observed concentrations were less than the detection limit with the exceptions of both Iron samples (2018 and 2019) and a single Arsenic sample (2018). 20 pH measurements, 21 measurements for Total Suspended Solids (TSS) and Turbidity were also reviewed with only two exceedances of the permit limits for TSS and Turbidity, and no pH exceedances. A single Phosphorus measurement is available for this facility and it is less than the Water Quality Standard for the portion of Lake Champlain where discharge occurs of 0.014 mg/L.

Both of the limits for the Protection of Human Health Criteria (Consumption of Water and Organisms [0.00002 mg/L] and Consumption of Organisms Only [0.0015 mg/L]) are exceeded for the single Arsenic value above the detection limit (0.0016 mg/L). The observed value is below the acute and chronic criteria for the protection of aquatic biota of 0.340 mg/L and 0.150 mg/L. Due to the limited available data it is recommended that increased Arsenic monitoring be added to the permit. A reopener clause should be included to allow for permit amendment if monitoring data indicates a continued threat to human health.

This facility is subject to 10 V.S.A. 1266a, which reads “No person directly discharging into the drainage basins of Lake Champlain or Lake Memphremagog shall discharge any waste that contains a phosphorus concentration in excess of 0.80 milligrams per liter on a monthly average basis. Discharges of less than 200,000 gallons per day, permitted on or before July 1, 1991, shall not be subject to the requirements of this subsection.” Therefore, the permit must include a Total Phosphorus limit of 0.8 mg/L.

Considering these factors, the Wastewater Program concludes this facility and its discharge as currently operated and permitted, does not have the potential to cause, or contribute to a lacustrine toxic impact or excursion above the water quality criteria. Given the detection of Arsenic reported in 2018 further data are needed to fully assess reasonable potential for exceedance of the Arsenic VWQS. It is recommended that Arsenic be analyzed at the same frequency as TSS, pH and Turbidity for a minimum of one year to obtain additional data to assess the discharge.